

Table 2. Rationale for use of indicators in water-resource-quality-monitoring programs for meeting water-management objectives relevant to selected uses. These are status and trends indicators meant to illustrate the suitability of a water resource for use by a management objective rather than demonstrate effects of a particular management objective on that water resource—Continued

Categories of indicators	Human health and aesthetics		Ecological condition		Economic concerns		
	Consumption of fish, shellfish, and wildlife	Public water supply and food processing	Recreation: Boating, swimming, and fishing (including catchability) ¹	Aquatic and semi-aquatic life, protected species and aquaculture	Industry: Makeup and cooling water, and other types of water	Transportation and hydropower	Agriculture
Part 2—Indicators of chemical response and exposure—Continued							
Potentially hazardous chemicals in bottom or suspended sediment.	Gut contents of shellfish could be toxic [35].	Toxic to humans.	Toxic to swimmers.	Toxic to aquatic life [7, 34].	Affects pre- and post-treatment.	Polluted sediment affects dredge permits [24].	Chemical pollution affects agriculture
Potentially hazardous chemicals in animal and plant tissue, bioaccumulation.	Bioaccumulated chemicals toxic to consumer [35].			Show exposure, toxicity affects community [30].			
Part 3—Indicators of physical habitat							
Quantity of water: Drainage area, water level, stream order, velocity, hydrologic regime, flow duration.	Flow affects bacterial concentrations in shellfish.	Knowledge of quantity is required for use.	Maintenance of flow for rafting and fisheries [25].	Depth and flow needed for habitat, and aquaculture [3].	Required quantity.	Quantity required to maintain depth.	Required quantity for irrigation
Water temperature.	Alters growth rate of harmful bacteria and algae.	Chemical treatment is temperature dependent.	Swimming and fisheries are temperature dependent [25].	Life processes and community structure are temperature dependent [10].	Affects suitability as cooling water and type of chemical treatment.	Affects density and equipment longevity.	Can affect navigation, recreation, and agriculture